APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,119	06/10/2002	Reiner Gieck		1678

29177   7590   12/08/2008
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EXAMINER
AGHDAM, FRESHTEH N

ART UNIT	PAPER NUMBER
2611	

MAIL DATE	DELIVERY MODE
12/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/048,119	GIECK, REINER
Office Action Summary	Examiner	Art Unit	
	FRESHTEH N. AGHDAM	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 August 2008*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-10* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-10* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed August 13, 2008 have been fully considered but they

are not persuasive.

Applicant's Argument(s):

Regarding claims 1-10, page 5, the applicant argues the claimed subject matter

"determining <u>in a test setup</u> and storing in a table at least one transmission method, with

at least one transmission speed that represents a maximum data throughput rate for

different <u>stored</u> line parameters of lines" is not taught or suggested by Goodson.

Examiner's Response:

Regarding the argument set forth above, the examiner disagrees with the

applicant because Goodson teaches determining in a <u>test setup</u> (training period) and

storing in a table (lookup table in memory) at least one transmission method, with at

least one transmission speed that represents a maximum data throughput rate for

different <u>stored</u> (in a lookup table in memory) line parameters of a line (col. 9, lines 53-

56).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 as not falling within one of the four

statutory categories of invention. While the claims recite a series of steps or acts to be

performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another

statutory category (such as a particular apparatus), or (2) transform underlying subject

matter (such as an article or material) to a different state or thing (Reference the May

15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy,

John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant

claims neither transform underlying subject matter nor positively tie to another statutory

category that accomplishes the claimed method steps, and therefore do not qualify as a

statutory process.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Goodson et al (US 5,715,277).

As to claim 1, Goodson discloses a method of data transmission comprising:

determining and storing in a table (e.g. in a memory including at least a lookup table) at

least one transmission method, with at least one transmission speed (e.g. carrier

frequency/ symbol rate) that represents a maximum data throughput rate (e.g.

maximum bit rate) for different line parameters of a line (e.g. SDR value, line

attenuation, and so forth); measuring line parameters of a line (e.g. distortion; Col. 1,

lines 32-60) using at least one transmission method (e.g. probe signals L1 and L2); and

selecting a transmission method having a transmission speed in which the measured

line parameters are most compatible (Col. 9, lines 30-67, Col. 11, lines 36-67). Goodson

does not expressly disclose determining and storing in a table at least one transmission

method with at least one transmission speed that represents a maximum data

throughput rate for different line parameters of lines. However, one of ordinary skill in

the art would recognize that each modem (such as modems 100 and 101) may

communicate with more than one other modem. Therefore, it would have been obvious

to one of ordinary skill in the art to include more than one lookup table in memory,

wherein each lookup table contains information of at least one transmission method with

at least one transmission speed that represents a maximum data rate for different line

parameters of lines in order to save space in said modem or reduce size of said

modem.

As to claim 2, Goodson discloses the line parameters are represented by the

attenuation, timing frequency offset (running time), and interference (additive noise or

channel induced noise distortion) of the line (Fig. 8, means 825; col. 5, lines 20-33; col.

10, lines 21-30). Goodson does not expressly disclose the line parameters are

represented by the running time of the line. However, one of ordinary skill in the art

would recognize that the more line parameters (such as running time, carrier frequency

offset, envelope delay distortion, and so forth) measured the higher the accuracy of the

selected transmission method and transmission speed in view of the maximum

allowable data throughput is. Therefore, it would have been obvious to one of ordinary

skill in the art to measure the running time in addition to the attenuation and interference

for the reason stated above.

As to claim 3, Goodson discloses the running time (timing frequency offset) is

determined by a measurement of the phase difference between two signals with

different frequencies, one of the two signals formed according to the transmission

method (col. 4, lines 56-63; col. 5, lines 20-33; col. 10, lines 21-30).

As to claim 4, Goodson discloses the maximum data rate for different line

parameters is determined with different transmission methods and transmission speeds,

by selecting the transmission methods in the frequency range of which the line

parameters demonstrate the least variations (Fig. 8, means 829 and 840; Col. 9, lines

30-67, Col. 11, lines 36-67). Goodson does not expressly disclose the line parameters

are represented by the running time of the line. However, one of ordinary skill in the art

would recognize that the more line parameters (such as running time, envelope delay

distortion, and so forth) measured the higher the accuracy of the selected transmission

method and transmission speed in view of the maximum allowable data throughput is.

Therefore, it would have been obvious to one of ordinary skill in the art to measure the

running time in addition to the attenuation and interference for the reason stated above.

As to claim 10, Goodson discloses determining in a test set up and storing in the

table, a wide variety of transmission procedures and line properties at different

frequencies and frequency ranges (Col. 2, lines 25-47).

Allowable Subject Matter

Claims 5-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gross et al (US 6,549,520) see column 24, lines 30-40.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRESHTEH N. AGHDAM whose telephone number is (571)272-6037. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Freshteh N Aghdam/

Examiner, Art Unit 2611

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611